27. The rotary cutter of claim 26, wherein the cutting edge includes an edge angle that is substantially equal to forty-five degrees.

REMARKS

Pending claims 1-24 were rejected in the Office Action of 24 January 2002. Applicants offer the following remarks in response to that rejection:

3. Claims 1-24 are rejected under 35 U.S.C. §102(b), as being anticipated by United States Patent No. 2,265,955 issued to Roberts et al. (hereinafter referred to as "Roberts" or in the alternative under 35 U.S.C. §103(a) as obvious over Roberts. Specifically, the Examiner indicates that "[t]he reference appears to show the claimed details of the blade such as a diameter to width ratio of less than 10 and an edge angle of approximately 45 degrees. If the article is not approximately 45 degrees however it would appear to be an obvious matter for an artisan to specify such an angle which would create no new or unobvious results." Applicants respectfully disagree with the Examiner's characterization of Roberts and the rejection(s) based thereon.

Roberts discloses a glass cutting device that includes a pair of cutting wheels 19,27. FIGS. 1, and 3-5 show one or both wheels 19 and 27. Applicants find no disclosure within Roberts regarding attributes of either cutting wheel 19,27. Applicants also find no disclosure within Roberts regarding any use of the device disclosed by Roberts other than glass cutting. Indeed, Roberts discloses that the device is a specialized glass cutting device for cutting twin sheet "shatter proof" glass (see page 1, left column of Roberts).

Applicants respectfully submit that the term of art "glass cutter" when used with devices such as that disclosed by Roberts is a misnomer. The "cutting wheels" of Roberts actually do not and cannot cut glass in the sense of completely shearing the glass material. Glass is an amorphous solid that is not amenable to conventional cutting techniques (i.e., shearing techniques). Rather, force applied to a glass substrate through a "cutting wheel" creates a fissure within the glass that includes a pair of compression lines within the glass substrate. If sufficient bending force is subsequently applied to the glass substrate along the fissure, the substrate will fracture between the compression lines thereby creating a "cut". Hence, the "cutting wheel" does not cut the substrate, but rather creates a fault line along which the substrate can be fractured with geometric predictability. Enclosed